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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|--|----------------------|-----------------------|------------------|
| 10/527,257 | 03/09/2005 | Jun Wu | 34569-714.831 | 5292 |
| 21971 WILSON SON | 7590 11/30/2007 SONSINI GOODRICH & ROSATI | | EXAMINER | |
| 650 PAGE MI | LL ROAD | 7111 | BRISTOL, LYNN ANNE | |
| PALO ALTO, | CA 94304-1050 | | ART UNIT PAPER NUMBER | |
| | | | 1643 | |
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| | , | | MAIL DATE | DELIVERY MODE |
| | | • | 11/30/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | A - I' - A' A' | [A | | | |
|--|--|---|--|--|--|
| | Application No. | Applicant(s) | | | |
| | 10/527,257 | WU ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Lynn Bristol | 1643 | | | |
| The MAILING DATE of this communication Period for Reply | appears on the cover sheet w | ith the correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailling date of this communication. If NO period for reply is specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNI 1.136(a). In no event, however, may a iod will apply and will expire SIX (6) MON atute, cause the application to become Al | CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1)⊠ Responsive to communication(s) filed on 0 | 1 June 2007. | | | | |
| , | | | | | |
| 3) Since this application is in condition for allow | wance except for formal mat | ters, prosecution as to the merits is | | | |
| closed in accordance with the practice unde | er <i>Ex parte Quayle</i> , 1935 C.D |). 11, 453 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-8,14 and 15</u> is/are pending in the | e application. | | | | |
| 4a) Of the above claim(s) is/are without | drawn from consideration. | | | | |
| 5)⊠ Claim(s) <u>1 and 2</u> is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>3</u> is/are rejected. | | | | | |
| 7) Claim(s) <u>4-8, 14 and 15</u> is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and | d/or election requirement. | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Exam | iner. | | | | |
| 10) The drawing(s) filed on is/are: a) a | accepted or b) Objected to | by the Examiner. | | | |
| Applicant may not request that any objection to t | - ' ' | | | | |
| Replacement drawing sheet(s) including the corr | • | | | | |
| 11)☐ The oath or declaration is objected to by the | Examiner. Note the attached | d Office Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | • | | | | |
| 12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents | | § 119(a)-(d) or (f). | | | |
| 2. Certified copies of the priority docume | | application No. | | | |
| 3. Copies of the certified copies of the p | | • | | | |
| application from the International Bur | • | • | | | |
| * See the attached detailed Office action for a | | received. | | | |
| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | | Summary (PTO-413) | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) | | s)/Mail Date nformal Patent Application | | | |
| Paper No(s)/Mail Date | 6) Other: | · · | | | |

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DETAILED ACTION

- 1. Claims 1-8, 14 and 15 are all the pending claims for this application.
- 2. Claims 2, 4 and 8 were amended and Claims 9-13 were cancelled in the Response of 6/1/07.
- 3. The telephone interview with Applicants' representative, Shirely Chen, on 11/26/07 to discuss element b) of Claim 3 as being anticipated by prior art is made of record. Accordingly, the conditional allowance of Claims 3-7, 14 and 15 made in the Office Action of 5/8/07 is withdrawn and new grounds for rejection are raised as discussed below.
- 4. Claims 1-8, 14 and 15 are all the pending claims under examination.

Drawings

5. The replacement drawings for Figure 2A and 2B were received on 6/1/07. These drawings are acceptable and have been entered.

Applicants' explanation of the amended drawings on p. 3 of the Response of 6/1/07 is acknowledged.

Withdrawal of Objections

Specification

- 6. The objection to the disclosure is withdrawn for the following reasons:
- a) Amended figure legend for Figure 2A and 2B now discloses protein and nucleic acid sequences;

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- b) Amended figure legend for Figure 3A and 3B now describes hydrophobicity analysis for the membrane region for the proteins.
- c) Amended figure legend for Figure 7 now describes the expression spectrum for RL5 mRNA in tumor samples.

Applicants' amendments to the specification on p. 2 and their comments on p. 6 of the Response of 6/1/07 are acknowledged.

Claim Objections

7. The objection to Claim 2 for reciting the typographical error "is consisting of" is withdrawn.

Applicants' amendment of the claim to recite "consists of" overcomes the objection. Applicants' comments on p. 6 of the Response of 6/1/07 are acknowledged.

Claim Rejections - 35 USC § 112

8. The rejection of Claim 8 in lacking antecedent basis for the limitation "the expression conditions" in element a) is withdrawn.

The amendment of Claim 8 to recite that the protein is expressed from the expression vector of the transfected host cell overcomes the rejection. Applicants' comments on p. 7 of the Response of 6/1/07 are acknowledged.

9. The rejection of Claim 8 in lacking antecedent basis for the limitation "the culture" in element b) is withdrawn.

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Element a) of the claim has been amended to recite that host cells are cultured in order to express the protein. Applicants' comments on p. 7 of the Response of 6/1/07 are acknowledged.

New Grounds for Rejection

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by McBride et al. (Clin. Chem 35(11):2196-2201 (1989).

Claim 3 element b) is drawn in to an isolated polynucleotide that is complementary to the nucleotide encoding the polypeptide comprising amino acid sequence of SEQ ID NO:2, or the amino acid sequence of 29-213 of SEQ ID NO:2.

McBride discloses universal primers that hybridize to any genomic fragment or cDNA sequence and can be used for amplification purposes. Because the universal primers of McBride are specific but universal in their ability to recognize a complementary sequence, the primers of McBride would inherently or implicitly be fully complementary to the nucleic acid sequences of SEQ ID NO:2 in Claim 3. Further, because the claim is interpreted as reciting closed Markush group language, McBride

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need only read on the one element, element b), in order to anticipate the claim.

Conclusion

- 11. Claims 1 and 2 are in condition for allowance and Claims 4-8, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 12. A sequence search of SEQ ID NO:2 and amino acid residues 29-213 of SEQ ID NO:2; and SEQ ID NO:1 and nucleotide residues 1-639 and 85-639 of SEQ ID NO:1 was performed in commercial protein and nucleotide sequence databases, respectively. Three post-filing date references were identified which disclose the sequences of SEQ ID NO: 1 and 2 as shown in the sequence alignments provided in the Office Action of 5/8/07:

Strausberg et al. (PNAS 99:16899-16903 (December 2002)), was found to disclose a 213 amino acid residue protein having 99.5% identity with SEQ ID NO:2, and a fragment having 100% sequence identity with amino acid residues 29-213 of SEQ ID NO:2. Nucleotide residues 1-639 and 85-639 of SEQ ID NO:1 also aligned with corresponding sequences in Strasberg.

Bacon et al. (J. Immunol. 173:1078-1084 (2004) was found to disclose a nucleotide sequence having 100% identity with residues 1-639 and 85-639 of SEQ ID NO:1, and the nucleotide sequence encoding amino acid residues corresponding to SEQ ID NO:2 and residues 29-213 of SEQ ID NO:2.

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Harkin et al. (US2006134663; filed 11/3/04) was found to disclose a nucleotide sequence having 100% identity with residues 1-639 and 85-639 of SEQ ID NO:1, and the nucleotide sequence encoding amino acid residues corresponding to SEQ ID NO:2 and residues 29-213 of SEQ ID NO:2.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynn Bristol whose telephone number is 571-272-6883. The examiner can normally be reached on 8:00-4:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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LARRY R. HELMS, PH.D. SUPERVISORY PATENT EXAMINER